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APPLICATION-NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/520,264

01/06/2005

Gianantonio Pozzato

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EXAMINER

KAHELIN, MICHAEL WILLIAM

ART UNIT

PAPER NUMBER

3762

MAIL DATE

DELIVERY MODE

10/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/520,264

Applicant(s)

POZZATO, GIANANTONIO

Examiner

Michael Kahelin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 4) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20050106</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. In regards to claim 1, "it" is vague because it is unclear as to what "it" refers.
5. In regards to claim 7, "comprised" should read "comprising".
6. In regards to claim 8, "device carrying" should read "device for carrying"; and it is unclear as to what "it" refers.
7. In regards to claim 9, "the parasitic capacity", "the inductance" and "the radiofrequency transformer primary circuit" are all lacking antecedent basis.
8. In regards to claim 10, "a intermittent pulses train" should read "an intermittent pulses train", "consisting in" should read "consisting of"; and it is unclear as to what "them" refers.

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9. In regards to claims 12 and 13, "the rectified direct voltage" is lacking antecedent basis".

10. Further, in regards to claims 8-13, the term "piloting circuit" is not an art-recognized term.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Icenbice, Jr. (US 3,851,651, hereinafter "Icenbice").

13. In regards to claim 1, Icenbice discloses a cosmetic method comprising connecting an electronic device able to generate high frequency waves to laminar electrodes (Fig. 1), applying the electrodes to the skin surface (Fig. 1), activating the device (Fig. 4), and deactivating the device and removing the device from the treatment area (39 and col. 1, line 39). In regards to the limitation that the current waveform be a sinusoidal with the presence of harmonics, please see element 46 in Figure 3. As Icenbice applies square waves and square waves are the combination of sinusoids with odd integer harmonics, Icenbice meets the claim limitations.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 2-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Icenbice.

16. In regards to claims 2, 7, 8 and 14, Icenbice discloses the essential features of the claimed invention, as described above, and including an RF circuit comprising an electronic switch (99-101) fed by a voltage and piloted by a piloting circuit (43), and the resulting wave circulates in a broadband resonant circuit on the frequency of the pure wave (resonant electrode circuits corresponding to elements 35, 27, and 31). Icenbice does not disclose that the voltage is supplied by power grid voltage, stimulating for 0.5 to 5 minutes, that the harmonics are of the second and third order, or that the electrode is adhesive. It is well known in the art to provide electrical stimulators with power grid voltages to provide the predictable result of avoiding the need to provide expensive and unreliable batteries to said stimulators (see Dohert, US 2,311,935), and to provide adhesive electrodes to provide the predictable result of rigidly fixed electrodes (see Mawhinney, US 6,463,336). Further, it is well known in the art to provide transdermal stimulators with waveforms having harmonics of the second and third order (saw tooth waves) to provide the predictable result of providing a waveform that effectively treats skin maladies and to stimulate for 0.5 to 5 minutes to provide the predictable result of a

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convenient system that does not require long-term wear (see Slovak, US 5,058,605).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Icenbice's device by providing power grid voltages to provide the predictable result of avoiding the need to provide expensive and unreliable batteries, to stimulate for 0.5 to 5 minutes to provide the predictable result of a convenient system that does not require long-term wear, a waveform having harmonics of the second and third order (saw tooth waves) to provide the predictable result of providing a waveform that effectively treats skin maladies, and to provide adhesive electrodes to provide the predictable result of rigidly fixed electrodes.

17. In regards to claims 3-6, Icenbice discloses the essential features of the claimed invention except for applying a waveform having a frequency of about 4 MHz, power of 40-50W, or power density of 0.5 W/sq. cm. It is well known in the art to provide stimulation to the skin at a power of 0.5 W/sq. cm at 4 MHz to provide the predictable result of promoting the production of dermal proteins (see Mosk et al. US 6,882,884). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Icenbice's invention by providing stimulation to the skin at a power of 0.5 W/sq. cm at 4 MHz to provide the predictable result of promoting the production of dermal proteins. Further, Icenbice discloses the claimed invention but does not disclose expressly the 40-50 Watt power delivery. It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify stimulation system as taught by Icenbice with the claimed power delivery because applicant has not disclosed that this power provides an advantage, is used for a

particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the system as taught by Icenbice because both systems effectively stimulate the facial muscles. Therefore, it would have been an obvious matter of design choice to modify Icenbice's invention to obtain the invention as specified in the claims.

18. In regards to claim 9, Icenbice discloses the essential features of the claimed invention except for a resonant circuit having the parasitic capacity and inductance of the primary circuit. It is well known in the art to match secondary tank circuits with primary tank circuits to provide efficient power transmissions between the two circuits. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Icenbice's invention by matching the secondary tank circuit's capacitance and inductance with the primary tank circuit to provide the predictable result of efficient power transmissions between the two circuits.

19. In regards to claims 10-13, Icenbice discloses the essential features of the claimed invention including a circuit that interrupts the piloting circuit (40), but does not expressly disclose that this is done with a microprocessor, the waveform amplitude is modified by a regulator in the piloting circuit, or that the amplitude is modified by modifying the voltage on the RF circuit with the piloting circuit voltage being modified/held constant. It is well known in the art to modify various pulse generator parameters using a microprocessor to provide the predictable result of customizable control over a circuit, and to provide amplitude modulation to provide the predictable result of effectively stimulating tissue near its threshold (see Herbst, US 6,684,106).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Icenbice's invention by modifying various pulse generator parameters using a microprocessor to provide the predictable result of customizable control over a circuit, and to provide amplitude modulation to provide the predictable result of effectively stimulating tissue near its threshold. Further, Icenbice's modified invention discloses the claimed invention but does not disclose expressly the claimed methods of amplitude modulation. It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the system as taught by Icenbice with the claimed amplitude modulation strategies because applicant has not disclosed that these provide an advantage, are used for a particular purpose, or solve a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with the modified system as taught by Icenbice because both systems effectively treat facial tissue. Therefore, it would have been an obvious matter of design choice to modify Icenbice's invention to obtain the invention as specified in the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kahelin whose telephone number is (571) 272-8688. The examiner can normally be reached on M-F, 9-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWK



10/5/07


GEORGE R. EVANISKO
PRIMARY EXAMINER

10/9/7